This listing of claims will replace all prior versions, and listings, of claims in the application:

# **Listing of Claims:**

- 1. (Currently Amended) An electro-optical light modulation element comprising
  - a substrate or a plurality of substrates,
  - an electrode arrangement,
    - an element or a plurality of elements for polarisation of the light and
  - a mesogenic modulation medium, wherein
  - the light modulation element is operated at the temperature at which the modulation medium in the unaddressed state is in an optically isotropic phase and
  - the mesogenic modulation medium comprises a chiral component, component (A), which consists of one or more chiral compounds, at least one of which has an HTP of 30 μm<sup>-1</sup> or more, and
  - the mesogenic modulation medium comprises an achiral component, component (B), which consists of one or more achiral compounds,
  - the mesogenic modulation medium is operated at the temperature at which the light modulation element has a blue phase or
  - the mesogenic modulation medium is operated at the temperature at which the light modulation element is in the isotropic phase, wherein
  - the relative temperature dependence (dV\*<sub>10</sub>/dT) of the characteristic voltage for 10% relative contrast (V<sub>10</sub>) of the modulation medium is 30%/degree or less at a temperature of 2° above the characteristic temperature (T<sub>char.</sub>) in the range of +/-1° around this temperature.
- **2.** (**Previously Presented**) The electro-optical light modulation element according to Claim 1, wherein
  - the electrode arrangement is able to generate an electric field having a significant component parallel to the surface of the mesogenic modulation medium.
- **3.** (**Previously Presented**) The electro-optical light modulation element according to Claim 1, wherein

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- the mesogenic modulation medium has a blue phase.

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### **4.– 6.** (Cancelled)

- 7. (Previously Presented) The electro-optical light modulation element according to Claim 1, wherein
  - the relative temperature dependence ( $dV*_{10}/dT$ ) is 23%/degree or less.
- **8.** (**Currently Amended**) An The electro-optical light modulation element according to Claim 1, wherein comprising
  - a substrate or a plurality of substrates,
  - an electrode arrangement,
    - an element or a plurality of elements for polarisation of the light and
  - a mesogenic modulation medium, wherein
  - the light modulation element is operated at the temperature at which the modulation medium in the unaddressed state is in an optically isotropic phase and
  - the mesogenic modulation medium comprises a chiral component, component (A), which consists of one or more chiral compounds, at least one of which has an HTP of 30 μm<sup>-1</sup> or more, and
  - the mesogenic modulation medium comprises an achiral component, component (B), which consists of one or more achiral compounds,
  - the mesogenic modulation medium is operated at the temperature at which the light modulation element has a blue phase or
  - the mesogenic modulation medium is operated at the temperature at which the light modulation element is in the isotropic phase

### <u>and</u>

- the characteristic voltage for 10% relative contrast ( $V_{10}$ ) at a temperature of  $2^\circ$  above the characteristic temperature ( $T_{char.}$ ) of the modulation medium in cells is 80 V, preferably 60 V or less.
- **9.** (**Previously Presented**) The electro-optical light modulation element according to Claim 1, wherein
  - the mesogenic modulation medium comprises a chiral component, component (A), which consists of two or more chiral compounds.

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10. (Currently Amended) An The electro-optical light modulation element according to Claim 9, wherein comprising

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- a substrate or a plurality of substrates,
- an electrode arrangement,
  - an element or a plurality of elements for polarisation of the light and
- a mesogenic modulation medium, wherein
- the light modulation element is operated at the temperature at which the modulation medium in the unaddressed state is in an optically isotropic phase and
- the mesogenic modulation medium comprises a chiral component, component (A), which consists of two or more chiral compounds, at least one of which has an HTP of 30 μm<sup>-1</sup> or more, and
- the mesogenic modulation medium comprises an achiral component, component (B), which consists of one or more achiral compounds,
- the mesogenic modulation medium is operated at the temperature at which the light modulation element has a blue phase or
- the mesogenic modulation medium is operated at the temperature at which the light modulation element is in the isotropic phase,

#### and

all the chiral compounds of component (A) have the same sign of the HTP at 20°C in the reference mixture.

### 11. – 12. (Cancelled)

# 13. (Currently Amended) An The electro-optical light modulation element according to Claim 1, wherein

- <u>a substrate or a plurality of substrates</u>,
- an electrode arrangement,
  - an element or a plurality of elements for polarisation of the light and
- a mesogenic modulation medium, wherein
- the light modulation element is operated at the temperature at which the modulation medium in the unaddressed state is in an optically isotropic phase and
- the mesogenic modulation medium comprises a chiral component, component (A), which consists of one or more chiral compounds, at least one of which has an HTP of 30 μm<sup>-1</sup> or more, and
- the mesogenic modulation medium comprises an achiral component, component (B), which consists of one or more achiral compounds,
- the mesogenic modulation medium is operated at the temperature at which the

- light modulation element has a blue phase or
- the mesogenic modulation medium is operated at the temperature at which the light modulation element is in the isotropic phase

## and either

- the dielectric susceptibility ( $\varepsilon_{av.}$ ) of the modulation medium at a temperature of 4 degrees above the conversion temperature from the blue phase or from the cholesteric phase into the isotropic phase is 40 or more, or preferably 55 or more.
- the optical anisotropy at a temperature of 4 degrees below the transition temperature from the cholesteric phase into the isotropic phase is 0.050 or more.
- **14.** (**Currently Amended**) The electro-optical light modulation element of Claim 4, wherein
  - the optical anisotropy at a temperature of 4 degrees below the transition temperature from the cholesteric phase into the isotropic phase is 0.050 or more, preferably 0.080 or more.
- **15.** (**Previously Presented**) An electro-optical display containing one or more light modulation elements according to Claim 1.
- **16.** (**Previously Presented**) The electro-optical display according to Claim 15, wherein the display is addressed by means of an active matrix.
- **17.** (**Previously Presented**) An electro-optical display system containing one or more electro-optical displays according to Claim 15.
- **18.** (**Previously Presented**) The electro-optical display system according to Claim 17, which is a television screen, computer monitor or as both.

# **19. – 20.** Cancelled)

**21.** (**Previously Presented**) A method for the display of video signals or of digital signals or information, comprising transmitting video signals or digital signals to a display according to Claim 15.

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# 22. (Cancelled)

- 23. (Previously Presented) A mesogenic modulation medium which comprises
  - (a) a chiral component, component (A), which consists of one or more chiral compounds at least one of which has an HTP of 30  $\mu$ m<sup>-1</sup> or more, and
  - (b) optionally an achiral component, component (B), which consists of one or more achiral compounds.

## **24.** – **26.** (Cancelled)

- **27.** (**Previously Presented**) A medium according to Claim 23, having a characteristic temperature in the range from 0°C to 60°C.
- **28.** (**Currently Amended**) A medium according to Claim 32, wherein the blue phase has a temperature range of <u>at least</u> 5 degrees or more than 5 degrees.
- **29.** (**Currently Amended**) A medium according to Claim 28, wherein the blue phase has a temperature range of <u>at least</u> 10 degrees<del>-or more than 10 degrees</del>.
- 30. (Previously Presented) The electro-optical light modulation element according to Claim 1, wherein component (A) consists of one or more chiral components at least one of which has an HTP of  $50 \, \mu m^{-1}$  or more.
- 31. (Previously Presented) The electro-optical light modulation element according to Claim 1, wherein component (A) consists of one or more chiral components at least one of which has an HTP of 90  $\mu$ m<sup>-1</sup> or more.
- **32.** (**Currently Amended**) A medium according to Claim 23, having a blue phase, with a characteristic temperature in the range from -20°C° 0°C° or below to 80°C or above.

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